



Feature

Reduced to about 40% the cubic volume of P Case.

- New low profile case size.
- Compatible with automatic pick and place equipment.
- Meets or Exceeds EIA standard 535BAAC.
- Environment-Friendly(Pb-free) tantalum capacitor.

Precautions in using
Tantalum Capacitors

4 Characteristics
Explanation

SCN Series

SCS Series

SCS-P Series

SCM Series

SCF Series

SCE Series

SCL Series

PCS Series

PCL Series

Marking
Specification

Taping
Specification

Specifications

| | | | | | | | | | |
|---|-----------------------|---|-----|------|------|------|------|------|--|
| Capacitance | Range | 1.0 μ F to 10 μ F | | | | | | | |
| | Tolerance | $\pm 20\%$ (M) | | | | | | | |
| Dissipation Factor (Tan δ) | | Refer to Specification | | | | | | | |
| Leakage Current | | between 0.01CV and 0.5 μ A, whichever is larger | | | | | | | |
| Rated Voltage(VR) | T \leq 85°C | 4.0 | 6.3 | 10.0 | 16.0 | 20.0 | 25.0 | 35.0 | |
| Category Voltage(V) | 85°C < T \leq 125°C | 2.5 | 4.0 | 6.3 | 10.0 | 13.0 | 16.0 | 22.0 | |
| Surge Voltage(V) | T \leq 85°C | 5.2 | 8.0 | 13.0 | 20.0 | 25.0 | 32.0 | 44.0 | |
| | 85°C < T \leq 125°C | 3.2 | 5.0 | 8.0 | 13.0 | 16.0 | 20.0 | 28.0 | |
| Operating Temperature | | -55°C to 125°C | | | | | | | |

Standard Value and Case Size

| Cap.(μ F) | R . V | 4V(0G) | 6.3V(0J) | 10V(1A) | 16V(1C) | 20V(1D) | 25V(1E) |
|----------------|-------|---------|----------|---------|---------|---------|---------|
| 1.0 | 105 | J | J | J | J | | |
| 1.5 | 155 | | | | | | |
| 2.2 | 225 | J | J | J | J | | |
| 3.3 | 335 | | | | | | |
| 4.7 | 475 | J | J, K | J | | | |
| 6.8 | 685 | J | J | | | | |
| 10 | 106 | J, K, Q | J | J | | | |
| 15 | 156 | | | | | | |
| 22 | 226 | | | | | | |

Ratings & Part Number Reference

| Part Number | Case Size | Capacitance (μF) | DC Leakage (μA) @ +25°C Max. | DF (%) @ +25°C 120Hz Max. | ESR (Ω) @ +25°C Max. |
|---|-----------|-------------------------------|---|---------------------------|-------------------------------|
| 4 volt Rating @ +85°C (2.5 volt Rating @ +125°C) | | | | | |
| TCSCM0G105MJAR | J | 1.0 | 0.5 | 8.0 | 15 |
| TCSCM0G225MJAR | J | 2.2 | 0.5 | 8.0 | 10 |
| TCSCM0G475MJAR | J | 4.7 | 0.5 | 8.0 | 10 |
| TCSCM0G685MJAR | J | 6.8 | 0.5 | 8.0 | 6 |
| TCSCM0G106MJAR | J | 10 | 0.5 | 8.0 | 6 |
| TCSCM0G106MKAR | K | 10 | 0.5 | 20.0 | 6 |
| TCSCM0G106MQAR | Q | 10 | 0.5 | 18.0 | 9.4 |
| 6.3 volt Rating @ +85°C (4 volt Rating @ +125°C) | | | | | |
| TCSCM0J105MJAR | J | 1.0 | 0.5 | 8.0 | 15 |
| TCSCM0J225MJAR | J | 2.2 | 0.5 | 8.0 | 10 |
| TCSCM0J475MJAR | J | 4.7 | 0.5 | 8.0 | 10 |
| TCSCM0J475MKAR | K | 4.7 | 0.5 | 20.0 | 8 |
| TCSCM0J685MJAR | J | 6.8 | 0.5 | 8.0 | 6 |
| TCSCM0J106MJAR | J | 10 | 0.63 | 8.0 | 4 |
| 10 volt Rating @ +85°C (6.3 volt Rating @ +125°C) | | | | | |
| TCSCM1A105MJAR | J | 1.0 | 0.5 | 8.0 | 10 |
| TCSCM1A225MJAR | J | 2.2 | 0.5 | 8.0 | 10 |
| TCSCM1A475MJAR | J | 4.7 | 0.5 | 8.0 | 6 |
| TCSCM1A106MJAR | J | 10 | 1 | 20 | 7 |
| 16 volt Rating @ +85°C (10 volt Rating @ +125°C) | | | | | |
| TCSCM1C105MJAR | J | 1.0 | 0.5 | 8.0 | 15 |
| TCSCM1C225MJAR | J | 2.2 | 0.5 | 8.0 | 7.5 |

All technical data relates to an ambient temperature of +25°C.
 Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.0 volts.
 DCL is measured at rated voltage after 5 minutes.
 Insert M tolerance for $\pm 20\%$.